

# Face Detection Changes

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## Face Detection Changes

### Change 1:

Remove rms specific script and service files in rms bbappend file

```
cd meta-cmf-raspberrypi/meta-rdk-camera/recipes-extended/rms/
```

```
vi rms_git.bbappend
```

Disable below lines in rms bbappend file

```
do_install_append() {  
  
-install -Dm755 ${S}/startRMS.sh ${D}${base_libdir}/rdk/startRMS.sh  
  
-install -d ${D}${systemd_unitdir}/system  
  
-install -m 0644 ${S}/rms-launcher.service ${D}${systemd_unitdir}/system/  
  
+#install -Dm755 ${S}/startRMS.sh ${D}${base_libdir}/rdk/startRMS.sh  
+#install -d ${D}${systemd_unitdir}/system  
+#install -m 0644 ${S}/rms-launcher.service ${D}${systemd_unitdir}/system/  
  
install -Dm755 ${S}/rms.conf ${D}${prefix}/local/rms/bin/  
  
}  
  
-SYSTEMD_SERVICE_${PN}_append = "rms-launcher.service"  
+#SYSTEMD_SERVICE_${PN}_append = "rms-launcher.service"  
  
-FILES_${PN}_append = "  
  
-    ${systemd_unitdir}/system/rms-launcher.service \  
-    ${base_libdir}/rdk/startRMS.sh \  
-"  
  
+#FILES_${PN}_append = "  
+#    ${systemd_unitdir}/system/rms-launcher.service \  
+#    ${base_libdir}/rdk/startRMS.sh \  
+#"
```

### Change 2:

Remove cvr specific script and service files in cvr bbappend file

```
cd meta-cmf-raspberrypi/meta-rdk-camera/recipes-multimedia/cvr
```

```
vi cvr_git.bbappend
```

Disable below lines in cvr bbappend file

```
do_install_append() {  
  
mkdir -p ${D}${prefix}/local/cvr  
  
-install -Dm755 ${WORKDIR}/startCVR.sh ${D}${base_libdir}/rdk/startCVR.sh
```

```

-install -d ${D}${systemd_unitdir}/system

-install -m 0644 ${WORKDIR}/cvr-launcher.service ${D}${systemd_unitdir}/system/

+##install -Dm755 ${WORKDIR}/startCVR.sh ${D}${base_libdir}/rdk/startCVR.sh

+##install -d ${D}${systemd_unitdir}/system

+##install -m 0644 ${WORKDIR}/cvr-launcher.service ${D}${systemd_unitdir}/system/

install -Dm755 ${WORKDIR}/cvr.conf ${D}${prefix}/local/cvr/

}

-SYSTEMD_SERVICE_${PN}_append = "cvr-launcher.service"

+SYSTEMD_SERVICE_${PN}_append = "cvr-launcher.service"

-FILES_${PN}_append = " \

-  ${systemd_unitdir}/system/cvr-launcher.service \

-  ${base_libdir}/rdk/startCVR.sh \

-"

+FILES_${PN}_append = " \

+  ${systemd_unitdir}/system/cvr-launcher.service \

+  ${base_libdir}/rdk/startCVR.sh \

+#"

inherit systemd

```

### Change 3:

Add pw-capture in pipewire-launcher.service file

cd meta-cmf-raspberrypi/meta-rdk-camera/recipes-multimedia/pipewire/files/

vi startPipeWire.sh

Adding pw-capture in startPipeWire.sh file

```

pipewire &

pipewire-media-session &

+

+pw-capture &

```

### Change 4:

cd build-raspberrypi3-rdk-camera/tmp/work/cortexa7t2hf-neon-vfpv4-rdk-linux-gnueabi/pipewire/0.3.52-r0/git/src/examples

[pw-capture.cpp](#)

Copy this pw-capture.cpp file to above directory

### Change 5:

cd build-raspberrypi3-rdk-camera/tmp/work/cortexa7t2hf-neon-vfpv4-rdk-linux-gnueabi/pipewire/0.3.52-r0/git/src/examples

vi meson.build

Add below lines in end of the file

```

opencv = dependency( 'opencv4' )

```

```
executable('pw-capture',
'pw-capture.cpp',
c_args : [ '-D_GNU_SOURCE' ],
install : true,
dependencies : [pipewire_dep, mathlib, opencv],
)
```

#### Change 6:

```
cd meta-cmf-raspberrypi/recipes-core/packagegroups/
```

```
vi packagegroup-rdk-oss-camera.bbappend
```

Add opencv component in Camera build

```

wpa-supPLICANT \
+
+ opencv \
```

#### Change 7:

```
cd meta-cmf-raspberrypi/recipes-multimedia
```

[thumbnail.tar.gz](#)

Untar and copy this thumbnail folder to above directory

#### Change 8:

```
cd meta-cmf-raspberrypi/recipes-support/opencv
```

[opencv\\_4.1.0.bbappend](#)

Copy this opencv bbappend file to above directory

#### Change 9:

```
cd meta-cmf-camera/recipes-multimedia/pipewire
```

```
vi pipewire_git.bbappend
```

Add below line in this pipewire bbappend file

```
TARGET_CXXFLAGS += "-fpermissive"
```

#### Change 10:

```
cd build-raspberrypi3-rdk-camera/tmp/work/cortexa7t2hf-neon-vfpv4-rdk-linux-gnueabi/pipewire/0.3.52-r0/recipe-sysroot/usr/include/opencv4/opencv2/flann
```

```
vi logger.h
```

Line number : 81

```

int ret;
//int ret = vfprintf(stream, fmt, arglist);
```

Did above two line changes in this logger.h file

#### Change 11:

```
cd meta-openembedded/meta-oe/recipes-multimedia/pipewire
```

```
vi pipewire_git.bb
```

```
-DEPENDS = "alsa-lib dbus udev"
```

```
+DEPENDS = "alsa-lib dbus udev opencv"
```

Added opencv dependency component for PipeWire

## Lighttpd Changes

[lighttpd.conf](#)

[light.tar.gz](#)

Need to copy this lighttpd.conf and light.tar.gz files in RPI camera target

### **lighttpd.conf:**

Need to copy this lighttpd.conf file into /etc/lighttpd

### **light.tar.gz:**

copy this into camera target

Local system : scp light.tar.gz root@camera\_ip: /

### **camera target:**

```
cd /
```

```
tar -xzf light.tar.gz
```

While untar this light.tar.gz file the respective files will automatically copy to usr/bin , usr/lib , usr/share directory.

Once did above steps then reboot the target.

## Validation

Can view Face detected thumbnail image in browser page

[http://camera\\_ip:50050/detected\\_face.jpeg](http://camera_ip:50050/detected_face.jpeg)